

SEQUENCE LISTING

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<120> Methods Of Screening For Compounds That Modulate the
LSR-Leptin Interaction and Their Use in the Prevention
and Treatment of Obesity-Related Diseases

<130> 70.US2.REG

<150> 60/155,506
<151> 1999-09-22

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<222> 595

<223> 9-3-324 : polymorphic base C or T

<220>

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<222> 940

<223> 9-6-187 : polymorphic base C or T

<220>

<221> allele

<222> 1191

<223> 9-7-325 : polymorphic base A or G

<220>

<221> allele

<222> 1362

<223> 9-9-246 : polymorphic base G or C

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<221> allele

<222> 1658

<223> LSRX9f13-BM : polymorphic base deletion of AGG

<220>

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<222> 2079

<223> LSRX9f14-BM : polymorphic base T or G

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<223> 9-7-325 : polymorphic base A or G

<220>

<221> allele

<222> 1305

<223> 9-9-246 : polymorphic base G or C

<220>

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<222> 1601

<223> LSRX9f13-BM : polymorphic base deletion of AGG

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<222> 2022

<223> LSRX9f14-BM : polymorphic base T or G

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Arg Asp Ala Arg Ala Arg Arg Ala Gln Thr Ala Ala Met Ala Leu Leu
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gcc ggc ggg ctc tcc aga ggg ctg ggc tcc cac ccg gcc gcc gca ggc 307
Ala Gly Gly Leu Ser Arg Gly Leu Gly Ser His Pro Ala Ala Ala Gly
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Ser Thr Pro Thr Gln Pro Ile Val Ile Trp Lys Tyr Lys Ser Phe Cys
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Leu	Ser	Arg	Glu	Ser	Leu	Val	Val	*									
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[illegible][illegible][illegible]

THE **NEW** **YORK** **PUBLIC** **LIBRARY**

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Gly	Tyr	Pro	Gly	Asp	Phe	Asp	Arg	Thr	Ser	Ser	Val	Gly	Gly	His	Ser					
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tcc	cag	gtg	ccc	ctg	ctg	cgt	gaa	gtg	gat	ggg	agc	gta	tct	tca	gaa				1012	
Ser	Gln	Val	Pro	Leu	Leu	Arg	Glu	Val	Asp	Gly	Ser	Val	Ser	Ser	Glu					
				315				320				325								
gta	cga	agt	ggc	tac	agg	atc	cag	gct	aac	cag	caa	gat	gac	tcc	atg				1060	
Val	Arg	Ser	Gly	Tyr	Arg	Ile	Gln	Ala	Asn	Gln	Gln	Asp	Asp	Ser	Met					
				330				335				340				345				
agg	gtc	cta	tac	tat	atg	gag	aag	gag	cta	gcc	aac	ttc	gat	cct	tcc				1108	
Arg	Val	Leu	Tyr	Tyr	Met	Glu	Lys	Glu	Leu	Ala	Asn	Phe	Asp	Pro	Ser					
				350				355				360								
cgg	cct	ggc	cct	ccc	aat	ggc	cga	gtg	gaa	cgg	gcc	atg	agt	gaa	gta				1156	
Arg	Pro	Gly	Pro	Pro	Asn	Gly	Arg	Val	Glu	Arg	Ala	Met	Ser	Glu	Val					
				365				370				375								
acc	tcc	ctc	cat	gaa	gat	gac	tgg	cga	tct	cgg	cct	tcc	agg	gct	cct				1204	
Thr	Ser	Leu	His	Glu	Asp	Asp	Trp	Arg	Ser	Arg	Pro	Ser	Arg	Ala	Pro					
				380				385				390								
gcc	ctc	aca	ccc	atc	agg	gat	gag	gag	tgg	aat	cgc	cac	tcc	cct	cgg				1252	
Ala	Leu	Thr	Pro	Ile	Arg	Asp	Glu	Glu	Trp	Asn	Arg	His	Ser	Pro	Arg					
				395				400				405								
agt	ccc	aga	aca	tgg	gag	cag	gaa	ccc	ctt	caa	gaa	cag	cca	agg	ggc				1300	
Ser	Pro	Arg	Thr	Trp	Glu	Gln	Glu	Pro	Leu	Gln	Glu	Gln	Pro	Arg	Gly					
				410				415				420				425				
ggt	tgg	ggg	tct	ggg	cgg	cct	cgg	gcc	cgc	tct	gtg	gat	gct	cta	gat				1348	
Gly	Trp	Gly	Ser	Gly	Arg	Pro	Arg	Ala	Arg	Ser	Val	Asp	Ala	Leu	Asp					

540	545	550	
gaa gaa gaa gag gag ggc cac tat ccc cca gca cct ccg cct tac tct			1732
Glu Glu Glu Glu Glu Gly His Tyr Pro Pro Ala Pro Pro Pro Tyr Ser			
555	560	565	
gag act gac tcg cag gcc tcg agg gag cgg agg atg aaa aag aat ttg			1780
Glu Thr Asp Ser Gln Ala Ser Arg Glu Arg Arg Met Lys Lys Asn Leu			
570	575	580	585
gcc ctg agt cgg gaa agt tta gtc gtc tga tcccacgttt tgttatgtag			1830
Ala Leu Ser Arg Glu Ser Leu Val Val *			
590	595		
cttttataact tttttaattg gaattattgat gaaactcttc accaagccta ataaaa			1886
 <210> 15			
<211> 1829			
<212> DNA			
<213> Mus musculus			
 <400> 15			
gcaccgtcgc tgctagacgg ccgcg atg gcg ccg gcg gcc agc gcg tgt gct			52
	Met Ala Pro Ala Ala Ser Ala Cys Ala		
	1	5	
ggg gcg cct ggc tcc cac ccg gcc acc acg atc ttc gtg tgt ctt ttt			100
Gly Ala Pro Gly Ser His Pro Ala Thr Thr Ile Phe Val Cys Leu Phe			
10	15	20	25
ctc atc att tac tgc cca gac cgt gcc agt gcc atc cag gtg acc gtg			148
Leu Ile Ile Tyr Cys Pro Asp Arg Ala Ser Ala Ile Gln Val Thr Val			
	30	35	40
cct gac ccc tac cac gta gtg atc ctg ttc cag cca gtg aca cta cac			196
Pro Asp Pro Tyr His Val Val Ile Leu Phe Gln Pro Val Thr Leu His			
	45	50	55
tgc acc tac cag atg agc aat acc ctc aca gcc cct atc gtg atc tgg			244
Cys Thr Tyr Gln Met Ser Asn Thr Leu Thr Ala Pro Ile Val Ile Trp			
	60	65	70
aag tat aag tcg ttc tgt cgg gac cgt gtt gcc gac gcc ttc tcc cct			292
Lys Tyr Lys Ser Phe Cys Arg Asp Arg Val Ala Asp Ala Phe Ser Pro			
	75	80	85
gcc agc gtg gac aac cag ctc aac gcc cag ctg gcg gct ggc aac ccc			340
Ala Ser Val Asp Asn Gln Leu Asn Ala Gln Leu Ala Ala Gly Asn Pro			
	90	95	100
ggc tac aac ccc tat gtg gag tgc cag gac agc gta cgc act gtc agg			388
Gly Tyr Asn Pro Tyr Val Glu Cys Gln Asp Ser Val Arg Thr Val Arg			
	110	115	120
gtg gtg gcc acc aaa cag ggc aat gct gtg acc ctg gga gac tac tac			436
Val Val Ala Thr Lys Gln Gly Asn Ala Val Thr Leu Gly Asp Tyr Tyr			
	125	130	135
cag ggc agg aga atc acc atc aca gga aat gct ggc ctg acc ttc gag			484
Gln Gly Arg Arg Ile Thr Ile Thr Gly Asn Ala Gly Leu Thr Phe Glu			
	140	145	150
cag acg gcc tgg gga gac agt gga gtg tat tac tgc tcc gtg gtc tca			532
Gln Thr Ala Trp Gly Asp Ser Gly Val Tyr Tyr Cys Ser Val Val Ser			
	155	160	165
gcc caa gat ctg gat ggg aac aac gag gcg tac gca gag ctc att gtc			580
Ala Gln Asp Leu Asp Gly Asn Asn Glu Ala Tyr Ala Glu Leu Ile Val			
	170	175	180
ctt gat tgg ctc ttt gtg gtc gtg gtc tgc ctg gca agc ctc ctc ttc			628
Leu Asp Trp Leu Phe Val Val Val Val Cys Leu Ala Ser Leu Leu Phe			
	190	195	200
ttc ctc ctc ctg ggc atc tgc tgg tgc cag tgc tgt ccc cac acc tgc			676
Phe Leu Leu Leu Gly Ile Cys Trp Cys Gln Cys Cys Pro His Thr Cys			
	205	210	215
tgc tgc tat gtc aga tgt ccc tgc tgc cca gac aag tgc tgt tgc cct			724
Cys Cys Tyr Val Arg Cys Pro Cys Cys Pro Asp Lys Cys Cys Cys Pro			
	220	225	230

385					390					395					400
Gln	Glu	Gln	Pro	Arg	Gly	Gly	Trp	Gly	Ser	Gly	Arg	Pro	Arg	Ala	Arg
				405					410					415	
Ser	Val	Asp	Ala	Leu	Asp	Asp	Ile	Asn	Arg	Pro	Gly	Ser	Thr	Glu	Ser
			420					425					430		
Gly	Arg	Ser	Ser	Pro	Pro	Ser	Ser	Gly	Arg	Arg	Gly	Arg	Ala	Tyr	Ala
		435				440					445				
Pro	Pro	Arg	Ser	Arg	Ser	Arg	Asp	Asp	Leu	Tyr	Asp	Pro	Asp	Asp	Pro
	450				455					460					
Arg	Asp	Leu	Pro	His	Ser	Arg	Asp	Pro	His	Tyr	Tyr	Asp	Asp	Leu	Arg
465				470					475					480	
Ser	Arg	Asp	Pro	Arg	Ala	Asp	Pro	Arg	Ser	Arg	Gln	Arg	Ser	His	Asp
			485			490							495		
Pro	Arg	Asp	Ala	Gly	Phe	Arg	Ser	Arg	Asp	Pro	Gln	Tyr	Asp	Gly	Arg
		500				505					510				
Leu	Leu	Glu	Glu	Ala	Leu	Lys	Lys	Lys	Gly	Ala	Gly	Glu	Arg	Arg	Arg
	515					520					525				
Val	Tyr	Arg	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Gly	His	Tyr	Pro	Pro	
	530				535					540					
Ala	Pro	Pro	Pro	Tyr	Ser	Glu	Thr	Asp	Ser	Gln	Ala	Ser	Arg	Glu	Arg
545				550					555					560	
Arg	Met	Lys	Lys	Asn	Leu	Ala	Leu	Ser	Arg	Glu	Ser	Leu	Val	Val	
			565					570					575		

<210> 19
 <211> 526
 <212> PRT
 <213> Mus musculus

<400> 19
 Met Ala Pro Ala Ala Ser Ala Cys Ala Gly Ala Pro Gly Ser His Pro
 1 5 10 15
 Ala Thr Thr Ile Phe Val Cys Leu Phe Leu Ile Ile Tyr Cys Pro Asp
 20 25 30
 Arg Ala Ser Ala Ile Gln Val Thr Val Pro Asp Pro Tyr His Val Val
 35 40 45
 Ile Leu Phe Gln Pro Val Thr Leu His Cys Thr Tyr Gln Met Ser Asn
 50 55 60
 Thr Leu Thr Ala Pro Ile Val Ile Trp Lys Tyr Lys Ser Phe Cys Arg
 65 70 75 80
 Asp Arg Val Ala Asp Ala Phe Ser Pro Ala Ser Val Asp Asn Gln Leu
 85 90 95
 Asn Ala Gln Leu Ala Ala Gly Asn Pro Gly Tyr Asn Pro Tyr Val Glu
 100 105 110
 Cys Gln Asp Ser Val Arg Thr Val Arg Val Val Ala Thr Lys Gln Gly
 115 120 125
 Asn Ala Val Thr Leu Gly Asp Tyr Tyr Gln Gly Arg Arg Ile Thr Ile
 130 135 140
 Thr Gly Asn Ala Gly Leu Thr Phe Glu Gln Thr Ala Trp Gly Asp Ser
 145 150 155 160
 Gly Val Tyr Tyr Cys Ser Val Val Ser Ala Gln Asp Leu Asp Gly Asn
 165 170 175
 Asn Glu Ala Tyr Ala Glu Leu Ile Val Leu Val Tyr Ala Ala Gly Lys
 180 185 190
 Ala Ala Thr Ser Gly Val Pro Ser Ile Tyr Ala Pro Ser Ile Tyr Thr
 195 200 205
 His Leu Ser Pro Ala Lys Thr Pro Pro Pro Pro Ala Met Ile Pro
 210 215 220
 Met Arg Pro Pro Tyr Gly Tyr Pro Gly Asp Phe Asp Arg Thr Ser Ser
 225 230 235 240
 Val Gly Gly His Ser Ser Gln Val Pro Leu Leu Arg Glu Val Asp Gly
 245 250 255
 Ser Val Ser Ser Glu Val Arg Ser Gly Tyr Arg Ile Gln Ala Asn Gln

			260					265					270			
Gln	Asp	Asp	Ser	Met	Arg	Val	Leu	Tyr	Tyr	Met	Glu	Lys	Glu	Leu	Ala	
	275						280					285				
Asn	Phe	Asp	Pro	Ser	Arg	Pro	Gly	Pro	Pro	Asn	Gly	Arg	Val	Glu	Arg	
	290					295					300					
Ala	Met	Ser	Glu	Val	Thr	Ser	Leu	His	Glu	Asp	Asp	Trp	Arg	Ser	Arg	
305					310				315					320		
Pro	Ser	Arg	Ala	Pro	Ala	Leu	Thr	Pro	Ile	Arg	Asp	Glu	Glu	Trp	Asn	
			325						330					335		
Arg	His	Ser	Pro	Arg	Ser	Pro	Arg	Thr	Trp	Glu	Gln	Glu	Pro	Leu	Gln	
			340					345					350			
Glu	Gln	Pro	Arg	Gly	Gly	Trp	Gly	Ser	Gly	Arg	Pro	Arg	Ala	Arg	Ser	
		355					360					365				
Val	Asp	Ala	Leu	Asp	Asp	Ile	Asn	Arg	Pro	Gly	Ser	Thr	Glu	Ser	Gly	
	370					375					380					
Arg	Ser	Ser	Pro	Pro	Ser	Ser	Gly	Arg	Arg	Gly	Arg	Ala	Tyr	Ala	Pro	
385					390					395					400	
Pro	Arg	Ser	Arg	Ser	Arg	Asp	Asp	Leu	Tyr	Asp	Pro	Asp	Asp	Pro	Arg	
			405						410					415		
Asp	Leu	Pro	His	Ser	Arg	Asp	Pro	His	Tyr	Tyr	Asp	Asp	Leu	Arg	Ser	
			420					425					430			
Arg	Asp	Pro	Arg	Ala	Asp	Pro	Arg	Ser	Arg	Gln	Arg	Ser	His	Asp	Pro	
	435						440					445				
Arg	Asp	Ala	Gly	Phe	Arg	Ser	Arg	Asp	Pro	Gln	Tyr	Asp	Gly	Arg	Leu	
	450					455				460						
Leu	Glu	Glu	Ala	Leu	Lys	Lys	Lys	Gly	Ala	Gly	Glu	Arg	Arg	Arg	Val	
465					470					475					480	
Tyr	Arg	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Gly	His	Tyr	Pro	Pro	Ala	
			485						490					495		
Pro	Pro	Pro	Tyr	Ser	Glu	Thr	Asp	Ser	Gln	Ala	Ser	Arg	Glu	Arg	Arg	
			500					505						510		
Met	Lys	Lys	Asn	Leu	Ala	Leu	Ser	Arg	Glu	Ser	Leu	Val	Val			
		515					520					525				

<210> 20
 <211> 18
 <212> DNA
 <213> Homo Sapiens

<220>
 <221> misc_binding
 <222> 1..18
 <223> sequencing oligonucleotide PrimerPU

<400> 20
 tgtaaaacga cggccagt

18

<210> 21
 <211> 18
 <212> DNA
 <213> Homo Sapiens

<220>
 <221> misc_binding
 <222> 1..18
 <223> sequencing oligonucleotide PrimerRP

<400> 21
 caggaaacag ctatgacc

18

<210> 22
 <211> 20
 <212> DNA

<213> Artificial Sequence

<220>

<223> oligonucleotide sense primer

<400> 22

ctacaacccc tacgtcgagt

20

<210> 23

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> oligonucleotide anti sense primer

<400> 23

aggcggagat cgccagtcgt

20

<210> 24

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> oligonucleotide sense primer

<400> 24

cctttgtcca cgtcgtttac gctc

24

<210> 25

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> oligonucleotide anti sense primer

<400> 25

tcacagcgtt gccctgcttg

20

<210> 26

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> oligonucleotide sense primer

<400> 26

ttactgctcc gtgggtctcag c

21

<210> 27

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> oligonucleotide anti sense primer

<400> 27

agctactcct gtcaacgtct cc

22

<210> 28
 <211> 167
 <212> PRT
 <213> Bos taurus

<400> 28
 Met Arg Cys Gly Pro Leu Tyr Arg Phe Leu Trp Leu Trp Pro Tyr Leu
 1 5 10 15
 Ser Tyr Val Glu Ala Val Pro Ile Arg Lys Val Gln Asp Asp Thr Lys
 20 25 30
 Thr Leu Ile Lys Thr Ile Val Thr Arg Ile Asn Asp Ile Ser His Thr
 35 40 45
 Gln Ser Val Ser Ser Lys Gln Arg Val Thr Gly Leu Asp Phe Ile Pro
 50 55 60
 Gly Leu His Pro Leu Leu Ser Leu Ser Lys Met Asp Gln Thr Leu Ala
 65 70 75 80
 Ile Tyr Gln Gln Ile Leu Thr Ser Leu Pro Ser Arg Asn Val Val Gln
 85 90 95
 Ile Ser Asn Asp Leu Glu Asn Leu Arg Asp Leu Leu His Leu Leu Ala
 100 105 110
 Ala Ser Lys Ser Cys Pro Leu Pro Gln Val Arg Ala Leu Glu Ser Leu
 115 120 125
 Glu Ser Leu Gly Val Val Leu Glu Ala Ser Leu Tyr Ser Thr Glu Val
 130 135 140
 Val Ala Leu Ser Arg Leu Gln Gly Ser Leu Gln Asp Met Leu Arg Gln
 145 150 155 160
 Leu Asp Leu Ser Pro Gly Cys
 165

<210> 29
 <211> 146
 <212> PRT
 <213> Canis familiaris

<400> 29
 Val Pro Ile Arg Lys Val Gln Asp Asp Thr Lys Thr Leu Ile Lys Thr
 1 5 10 15
 Ile Val Ala Arg Ile Asn Asp Ile Ser His Thr Gln Ser Val Ser Ser
 20 25 30
 Lys Gln Arg Val Ala Gly Leu Asp Phe Ile Pro Gly Leu Gln Pro Val
 35 40 45
 Leu Ser Leu Ser Arg Met Asp Gln Thr Leu Ala Ile Tyr Gln Gln Ile
 50 55 60
 Leu Asn Ser Leu His Ser Arg Asn Val Val Gln Ile Ser Asn Asp Leu
 65 70 75 80
 Glu Asn Leu Arg Asp Leu Leu His Leu Leu Ala Ser Ser Lys Ser Cys
 85 90 95
 Pro Leu Pro Arg Ala Arg Gly Leu Glu Thr Phe Glu Ser Leu Gly Gly
 100 105 110
 Val Leu Glu Ala Ser Leu Tyr Ser Thr Glu Val Val Ala Leu Ser Arg
 115 120 125
 Leu Gln Ala Ala Leu Gln Asp Met Leu Arg Arg Leu Asp Leu Ser Pro
 130 135 140
 Gly Cys
 145

<210> 30
 <211> 163
 <212> PRT
 <213> Gallus gallus

<400> 30
 Met Cys Trp Arg Pro Leu Cys Arg Leu Trp Ser Tyr Leu Val Tyr Val

1		5		10		15									
Gln	Ala	Val	Pro	Cys	Gln	Ile	Phe	Gln	Asp	Asp	Thr	Lys	Thr	Leu	Ile
		20						25					30		
Lys	Thr	Ile	Val	Thr	Arg	Ile	Asn	Asp	Ile	Ser	His	Thr	Ser	Val	Ser
		35					40					45			
Ala	Lys	Gln	Arg	Val	Thr	Gly	Leu	Asp	Phe	Ile	Pro	Gly	Leu	His	Pro
		50				55					60				
Ile	Leu	Ser	Leu	Ser	Lys	Met	Asp	Gln	Thr	Leu	Ala	Val	Tyr	Gln	Gln
65					70					75				80	
Val	Leu	Thr	Ser	Leu	Pro	Ser	Gln	Asn	Val	Leu	Gln	Ile	Ala	Asn	Asp
				85				90						95	
Leu	Glu	Asn	Leu	Arg	Asp	Leu	Leu	His	Leu	Leu	Ala	Phe	Ser	Lys	Ser
		100						105					110		
Cys	Ser	Leu	Pro	Gln	Thr	Ser	Gly	Leu	Gln	Lys	Pro	Glu	Ser	Leu	Asp
		115					120					125			
Gly	Val	Leu	Glu	Ala	Ser	Leu	Tyr	Ser	Thr	Glu	Val	Val	Ala	Leu	Ser
		130				135					140				
Arg	Leu	Gln	Gly	Ser	Leu	Gln	Asp	Ile	Leu	Gln	Gln	Leu	Asp	Ile	Ser
145					150					155					160
Pro	Glu	Cys													

<210> 31
 <211> 146
 <212> PRT
 <213> Gorilla gorilla

<400> 31															
Val	Pro	Ile	Gln	Lys	Val	Gln	Asp	Asp	Thr	Lys	Thr	Leu	Ile	Lys	Thr
1				5					10				15		
Ile	Val	Thr	Arg	Ile	Ser	Asp	Ile	Ser	His	Thr	Gln	Ser	Val	Ser	Ser
			20					25					30		
Lys	Gln	Lys	Val	Thr	Gly	Leu	Asp	Phe	Ile	Pro	Gly	Leu	His	Pro	Ile
		35					40					45			
Leu	Thr	Leu	Ser	Lys	Met	Asp	Gln	Thr	Leu	Ala	Val	Tyr	Gln	Gln	Ile
		50				55					60				
Leu	Thr	Ser	Met	Pro	Ser	Arg	Asn	Met	Ile	Gln	Ile	Ser	Asn	Asp	Leu
65				70					75					80	
Glu	Asn	Leu	Arg	Asp	Leu	Leu	His	Val	Leu	Ala	Phe	Ser	Lys	Ser	Cys
			85					90					95		
His	Leu	Pro	Trp	Ala	Ser	Gly	Leu	Glu	Thr	Leu	Asp	Ser	Leu	Gly	Gly
		100						105					110		
Val	Leu	Glu	Ala	Ser	Gly	Tyr	Ser	Thr	Glu	Val	Val	Ala	Leu	Ser	Arg
		115					120					125			
Leu	Gln	Gly	Ser	Leu	Gln	Asp	Met	Leu	Trp	Gln	Leu	Asp	Leu	Ser	Pro
		130				135					140				
Gly	Cys														
145															

<210> 32
 <211> 167
 <212> PRT
 <213> Homo sapiens

<400> 32															
Met	His	Trp	Gly	Thr	Leu	Cys	Gly	Phe	Leu	Trp	Leu	Trp	Pro	Tyr	Leu
1				5					10				15		
Phe	Tyr	Val	Gln	Ala	Val	Pro	Ile	Gln	Lys	Val	Gln	Asp	Asp	Thr	Lys
			20					25					30		
Thr	Leu	Ile	Lys	Thr	Ile	Val	Thr	Arg	Ile	Asn	Asp	Ile	Ser	His	Thr
		35					40					45			
Gln	Ser	Val	Ser	Ser	Lys	Gln	Lys	Val	Thr	Gly	Leu	Asp	Phe	Ile	Pro
		50				55					60				
Gly	Leu	His	Pro	Ile	Leu	Thr	Leu	Ser	Lys	Met	Asp	Gln	Thr	Leu	Ala

Phe Ser Lys Ser Cys Ser Leu Pro Gln Thr Ser Gly Leu Gln Lys Pro
 115 120 125
 Glu Ser Leu Asp Gly Val Leu Glu Ala Ser Leu Tyr Ser Thr Glu Val
 130 135 140
 Val Ala Leu Ser Arg Leu Gln Gly Ser Leu Gln Asp Ile Leu Gln Gln
 145 150 155 160
 Leu Asp Val Ser Pro Glu Cys
 165

<210> 35
 <211> 146
 <212> PRT
 <213> Ovus aries

<400> 35
 Val Pro Ile Arg Lys Val Gln Asp Asp Thr Lys Thr Leu Ile Lys Thr
 1 5 10 15
 Ile Val Thr Arg Ile Asn Asp Ile Ser His Thr Gln Ser Val Ser Ser
 20 25 30
 Lys Gln Arg Val Thr Gly Leu Asp Phe Ile Pro Gly Leu His Pro Leu
 35 40 45
 Leu Ser Leu Ser Lys Met Asp Gln Thr Leu Ala Ile Tyr Gln Gln Ile
 50 55 60
 Leu Ala Ser Leu Pro Ser Arg Asn Val Ile Gln Ile Ser Asn Asp Leu
 65 70 75 80
 Glu Asn Leu Arg Asp Leu Leu His Leu Leu Ala Ala Ser Lys Ser Cys
 85 90 95
 Pro Leu Pro Gln Val Arg Ala Leu Glu Ser Leu Glu Ser Leu Gly Val
 100 105 110
 Val Leu Glu Ala Ser Leu Tyr Ser Thr Glu Val Val Ala Leu Ser Arg
 115 120 125
 Leu Gln Gly Ser Leu Gln Asp Met Leu Arg Gln Leu Asp Leu Ser Pro
 130 135 140
 Gly Cys
 145

<210> 36
 <211> 146
 <212> PRT
 <213> Pan troglodytes

<400> 36
 Val Pro Ile Gln Lys Val Gln Asp Asp Thr Lys Thr Leu Ile Lys Thr
 1 5 10 15
 Ile Val Thr Arg Ile Asn Asp Ile Ser His Thr Gln Ser Val Ser Ser
 20 25 30
 Lys Gln Lys Val Thr Gly Leu Asp Phe Ile Pro Gly Leu His Pro Ile
 35 40 45
 Leu Thr Leu Ser Lys Met Asp Gln Thr Leu Ala Val Tyr Gln Gln Ile
 50 55 60
 Leu Thr Ser Met Pro Ser Arg Asn Met Ile Gln Ile Ser Asn Asp Leu
 65 70 75 80
 Glu Asn Leu Arg Asp Leu Leu His Val Leu Ala Phe Ser Lys Ser Cys
 85 90 95
 His Leu Pro Trp Ala Ser Gly Leu Glu Thr Leu Asp Ser Leu Gly Gly
 100 105 110
 Val Leu Glu Ala Ser Gly Tyr Ser Thr Glu Val Val Ala Leu Ser Arg
 115 120 125
 Leu Gln Gly Ser Leu Gln Asp Met Leu Trp Gln Leu Asp Leu Ser Pro
 130 135 140
 Gly Cys
 145

<210> 37
 <211> 146
 <212> PRT
 <213> Pongo pygmaeus

<400> 37
 Val Pro Ile Gln Lys Val Gln Asp Asp Thr Lys Thr Leu Ile Lys Thr
 1 5 10 15
 Val Ile Thr Arg Ile Asn Asp Ile Ser His Thr Gln Ser Val Ser Ser
 20 25 30
 Lys Gln Lys Val Thr Gly Leu Asp Phe Ile Pro Gly Leu His Pro Ile
 35 40 45
 Leu Thr Leu Ser Lys Met Asp Gln Thr Leu Ala Val Tyr Gln Gln Ile
 50 55 60
 Leu Thr Ser Met Pro Ser Arg Asn Val Ile Gln Ile Ser Asn Asp Leu
 65 70 75 80
 Glu Asn Leu Arg Asp Leu Leu His Val Leu Ala Phe Ser Lys Ser Cys
 85 90 95
 His Leu Pro Trp Ala Ser Gly Leu Glu Thr Leu Asp Arg Leu Gly Gly
 100 105 110
 Val Leu Glu Ala Ser Gly Tyr Ser Thr Glu Val Val Ala Leu Ser Arg
 115 120 125
 Leu Gln Arg Ser Leu Gln Asp Met Leu Trp Gln Leu Asp Leu Ser Pro
 130 135 140
 Gly Cys
 145

<210> 38
 <211> 167
 <212> PRT
 <213> Rattus norvegicus

<400> 38
 Met Cys Trp Arg Pro Leu Cys Arg Phe Leu Trp Leu Trp Ser Tyr Leu
 1 5 10 15
 Ser Tyr Val Gln Ala Val Pro Ile His Lys Val Gln Asp Asp Thr Lys
 20 25 30
 Thr Leu Ile Lys Thr Ile Val Thr Arg Ile Asn Asp Ile Ser His Thr
 35 40 45
 Gln Ser Val Ser Ala Arg Gln Arg Val Thr Gly Leu Asp Phe Ile Pro
 50 55 60
 Gly Leu His Pro Ile Leu Ser Leu Ser Lys Met Asp Gln Thr Leu Ala
 65 70 75 80
 Val Tyr Gln Gln Ile Leu Thr Ser Leu Pro Ser Gln Asn Val Leu Gln
 85 90 95
 Ile Ala His Asp Leu Glu Asn Leu Arg Asp Leu Leu His Leu Leu Ala
 100 105 110
 Phe Ser Lys Ser Cys Ser Leu Pro Gln Thr Arg Gly Leu Gln Lys Pro
 115 120 125
 Glu Ser Leu Asp Gly Val Leu Glu Ala Ser Leu Tyr Ser Thr Glu Val
 130 135 140
 Val Ala Leu Ser Arg Leu Gln Gly Ser Leu Gln Asp Ile Leu Gln Gln
 145 150 155 160
 Leu Asp Leu Ser Pro Glu Cys
 165

<210> 39
 <211> 167
 <212> PRT
 <213> Sus scrofa

<400> 39
 Met Arg Cys Gly Pro Leu Cys Arg Phe Leu Trp Leu Trp Pro Tyr Leu

1		5		10		15									
Ser	Tyr	Val	Glu	Ala	Val	Pro	Ile	Trp	Arg	Val	Gln	Asp	Asp	Thr	Lys
		20						25					30		
Thr	Leu	Ile	Lys	Thr	Ile	Val	Thr	Arg	Ile	Ser	Asp	Ile	Ser	His	Met
		35					40					45			
Gln	Ser	Val	Ser	Ser	Lys	Gln	Arg	Val	Thr	Gly	Leu	Asp	Phe	Ile	Pro
		50				55					60				
Gly	Leu	His	Pro	Val	Leu	Ser	Leu	Ser	Lys	Met	Asp	Gln	Thr	Leu	Ala
65					70					75					80
Ile	Tyr	Gln	Gln	Ile	Leu	Thr	Ser	Leu	Pro	Ser	Arg	Asn	Val	Ile	Gln
				85					90					95	
Ile	Ser	Asn	Asp	Leu	Glu	Asn	Leu	Arg	Asp	Leu	Leu	His	Leu	Leu	Ala
			100					105					110		
Ser	Ser	Lys	Ser	Cys	Pro	Leu	Pro	Gln	Ala	Arg	Ala	Leu	Glu	Thr	Leu
		115					120					125			
Glu	Ser	Leu	Gly	Gly	Val	Leu	Glu	Ala	Ser	Leu	Tyr	Ser	Thr	Glu	Val
		130				135					140				
Val	Ala	Leu	Ser	Arg	Leu	Gln	Gly	Ala	Leu	Gln	Asp	Met	Leu	Arg	Gln
145					150					155					160
Leu	Asp	Leu	Ser	Pro	Gly	Cys									
				165											

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His Leu Pro Trp Ala Ser
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